

AMENDED CLAIM SET

The claims have been amended as follows:

1. (currently amended) An igniter assembly, comprising: in which
_____ an igniter; and
_____ a substantially cylindrical metal collar that surrounds for holding the igniter, the
substantially cylindrical metal collar including a collar main body portion and at least one of a
first protruding portion extending upward in an axial direction of the igniter from the collar main
body portion and a second protruding portion extending inward towards the igniter in a radial
direction of the igniter from the collar main body portion; and -from outside are integrated by
_____ a resin provided existing between the igniter and the metal collar to support the igniter
with respect to the substantially cylindrical metal collar, the resin being provided such that at
least a part of the igniter is exposed from the resin,

wherein the substantially cylindrical metal collar has at least one of a protruding portion
extending axially upward from a collar main body portion and a protruding portion extending
radially inward from a collar main body portion, and at least part of at least one of the first
protruding portion and the second the protruding portion is in contact with the resin, and

an outer surface of the substantially cylindrical metal collar and an outer surface of the
resin form a common are substantially in the same plane that extends in at least one of the axial
direction and the radial direction.

2. (currently amended) ~~The An~~-igniter assembly as claimed in claim 1, wherein in
which the first protruding portion extending axially upward from the collar main body portion is
cylindrical in shape~~a cylindrical protruding portion~~, and the second protruding portion is circular
in shape~~extending radially inward from a collar main body portion is a circular protruding~~
portion.

3. (currently amended) ~~The An~~-igniter assembly as claimed in claim 1 or 2,
wherein in which a material of the metal collar is one of iron and or aluminum.

4. (currently amended) An igniter assembly, comprising: in which
_____ an igniter; and
_____ a substantially cylindrical metal collar that surrounds for holding the igniter, the
substantially cylindrical metal collar including a collar main body portion and a cylindrical
protruding portion extending upward in an axial direction of the igniter from the collar main
body portion, and the cylindrical protruding portion being provided with one of a stepped portion
and a circular inclined surface in an outer surface of the cylindrical protruding portion at a
vicinity of an upper end thereof; and from outside are integrated by
_____ a resin provided existing between the igniter and the metal collar to support the igniter
with respect to the substantially cylindrical metal collar,

wherein the substantially cylindrical metal collar has at least a cylindrical protruding
portion extending axially upward from a collar main body portion,

~~_____ in the cylindrical protruding portion, a contacting portion where a circular end surface contacts an outer surface is cut and formed in a cylindrical stepped portion or a circular inclined surface,~~

~~the said one of the cylindrical stepped portion and or the cylindrical inclined surface of the cylindrical protruding portion and an inner surface of the cylindrical protruding portion are covered with the resin, the an outer surface of the cylindrical protruding portion except for a portion where the one of the cylindrical stepped portion and or the cylindrical inclined surface is formed is not covered with the resin, and the outer surface of the cylindrical protruding portion substantially cylindrical metal collar and an outer surface of the resin form a common are substantially in the same plane that extends in the axial direction.~~

5. (currently amended) The An-igniter assembly as claimed in claim 4, wherein in
~~which~~ a material of the metal collar is iron.

6. (currently amended) The An-igniter assembly as claimed in claim 4, wherein in
~~which~~ the substantially cylindrical metal collar further includes, has

_____ a circular protruding portion extending radially inward in a radial direction of the igniter from the collar main body portion,

_____ one of a circular stepped portion and or a circular inclined surface formed in a is
~~arranged on the lower surface side of the circular protruding portion, and~~

wherein, said one of the circular stepped portion and or the circular inclined surface is
covered with the resin.

7. (currently amended) The An-igniter assembly as claimed in claim 6, wherein in
~~which~~ a material of the metal collar is aluminum.

8. (currently amended) An igniter assembly, comprising: in which
an igniter; and
a substantially cylindrical metal collar that surrounds for holding the igniter; and from
outside are integrated by
a resin provided existing between the igniter and the metal collar to support the igniter
with respect to the substantially cylindrical metal collar,

wherein the metal collar has such a strength as slightly deforms the resin in a fused state
is injected under pressure into a space between the igniter and the substantially cylindrical metal
collar to deform the substantially cylindrical metal collar, such that a tight contact between the
substantially cylindrical metal collar and the resin is formed as the fused resin shrinks and the
substantially cylindrical metal collar returns to an original shape on receiving injection pressure
by an injection molding means of a resin;
the resin is charged between the igniter and the metal collar by the injection molding
means; and

~~_____ a helium leakage quantity prescribed in JIS Z2331 in a contact surface between the metal collar and the resin is less than 1×10^{-6} Pa·m³/s (air conversion).~~

9. (currently amended) ~~The~~ An-igniter assembly as claimed in claim 8, wherein in ~~which the~~ substantially cylindrical metal collar includes a collar main body portion and has at least one of a cylindrical protruding portion extending axially upward in an axial direction of the igniter from the collar main body portion and a circular protruding portion extending radially inward in a radial direction of the igniter from the collar main body portion, and said one of the cylindrical protruding portion and or the circular protruding portion slightly deforms when the resin in the fused state is injected under pressure on receiving injection pressure by an injection-molding means of a resin.

10. (currently amended) ~~The~~ An-igniter assembly as claimed in claim 9, wherein the cylindrical protruding portion is provided with one of a stepped portion and a circular inclined surface in an outer surface of the cylindrical protruding portion at a vicinity of an upper end thereof in which, in the cylindrical protruding portion, a contacting portion where a circular end surface contacts an outer surface is cut and formed in a cylindrical stepped portion or a circular inclined surface, the circular protruding portion has one of a circular stepped portion and or a circular inclined surface formed in a the lower surface side of the circular protruding portion, and said one of the cylindrical protruding portion and ~~or the circular protruding portion slightly~~

deforms when the resin in the fused state is injected under pressure~~on receiving injection pressure by an injection molding means of a resin.~~

11. (currently amended) ~~An~~The igniter assembly as claimed in claim 8 or 9, wherein in which the metal collar is made of one of aluminum and ~~or~~ aluminum alloy that slightly deforms by the injection pressure of not less than ~~9Mpa~~9 MPa.

12. (currently amended) ~~An~~The igniter assembly as claimed in any one of claims 1, 4, and 8, wherein in which the resin is a polyamide resin.

13. (currently amended) A method of manufacturing an igniter assembly, comprising: as claimed in claim 8 or 9, which comprises the steps of
placing a substantially cylindrical metal collar around an igniter such that a space is formed between the substantially cylindrical metal collar and the igniter;
charging loading a resin in a fused state and under pressure into the space, such that the substantially cylindrical metal collar is deformed due to the pressure of the fused resin; and
cooling the fused resin, such that a tight contact between the substantially cylindrical metal collar and the resin is formed as the fused resin shrinks and the substantially cylindrical metal collar returns to an original shape~~between the substantially cylindrical metal collar and the igniter by an injection molding means at the injection pressure of not less than 9MPa and then curing the resin with keeping the pressure of not less than 9MPa.~~

14. (new) The igniter assembly as claimed in claim 1, wherein the igniter has an igniting portion and a conductive pin extending downward from the igniting portion, and the first protruding portion surrounds at least a portion of the igniting portion and the second protruding portion surrounds at least a portion of the conductive pin.

15. (new) The igniter assembly as claimed in claim 8, wherein a helium leakage quantity in a contact surface between the substantially cylindrical metal collar and the resin is less than $1 \times 10^{-6} \text{ Pa} \cdot \text{m}^3/\text{s}$.

16. (new) The method of claim 13, wherein the charging step includes the step of charging the fused resin at a pressure of not less than ~~9Mpa~~9 MPa and then curing the resin while keeping the pressure of not less than ~~9Mpa~~9 MPa.